

## REMARKS

Reconsideration and allowance of the present application are respectfully requested. Claims 1-17 remain pending in the application. Claim 18 has been added to recite features of original claim 4.

On page 2 of the Office Action, claims 1, 5-7, 9-12, 14 and 17 are rejected under 35 U.S.C. §102(b) as being anticipated by U.S. Patent No. 4,802,731 (Maschek et al), which is commonly owned by the assignee of the present application.

This rejection is respectfully traversed, as the Maschek patent fails to teach or suggest all features recited in Applicant's independent claims 1 and 11. For Example, independent claim 1 recites, among other features, an optical fiber arranged within a capillary, which in turn is arranged within an insulating part of a high-voltage component, wherein the capillary comprises a protective medium to achieve dielectric strength in the capillary, which dielectric strength is suitable for the operating conditions. In contrast, the Maschek patent does not disclose such a capillary. In addition, element 19 in Figure 5 of the Maschek patent does not constitute a protective medium as recited in Applicant's current claim 1. As such, independent claim 1 is allowable. Independent method claim 11 is similarly allowable.

An exemplary embodiment of the present invention is illustrated in Figure 1 as a high-voltage component having a first end 1 and a second end 2, wherein under operating conditions, the first end is on a high-voltage potential with respect to the second end. The claim 1 high-voltage component includes, among other features, an insulating part, such as insulating part 3, arranged between the first end and the second end. An optical fiber 4 is integrated in the component. The optical fiber 4 is arranged within a capillary 5, the capillary 5 being arranged within the insulating part. The capillary 5 includes a protective medium 6 to achieve a dielectric strength in the capillary 5 which is suitable for the operating conditions (i.e., whereby the first end 1 is on a high-voltage potential with respect to the second end 2).

According to exemplary embodiments, the capillary can accommodate the optical fiber, within the insulating part such that the fiber is not exposed to direct contact with materials of the insulating part. As such, the type of fiber and fiber

coating can be selected without regard to materials of the insulating part. Despite this, high dielectric strength can be achieved in a manner as described within the first paragraph on specification page 7. For example, as further described on specification page 15, Applicants' use of a protective medium within the capillary provides an increased dielectric strength. For example, dry nitrogen or a transformer oil, or dielectric gel can be used.

As already mentioned, the foregoing features are broadly encompassed by independent claim 1, which recites a high-voltage component comprising, among other features, a first end and a second end, wherein under operating conditions, the first end is on a high-voltage potential with respect to the second end. The claim 1 combination includes a fiber arranged within a capillary, wherein the capillary comprises a protective medium to achieve a dielectric strength in the capillary, which is suitable for the operating conditions.

In contrast, the Maschek patent is directed to an optical waveguide arrangement for a high-voltage insulator such as can be used in high-voltage technology where an electrical potential difference is bridged with optical fibers. On page 2 of the Office Action, the Examiner refers to element 10 of the Maschek patent, which is described as a high-voltage-conducting assembly. The Examiner characterizes a metallic high-voltage flange 9 as Applicants' claimed "first end" and characterizes a metallic bottom flange 5 of the Maschek patent as Applicants' claimed "second end". The Examiner refers to the high-voltage insulator 6 of the Maschek patent as Applicants' claimed "insulating part", and refers to the optical waveguide 11 of Maschek as Applicants' claimed optical fiber.

On page 2 of the Office Action, the Examiner asserts:

"... the high-voltage component comprises at least one capillary which extends from the first end to the second end and which is arranged within the insulating part, wherein the inside diameter of the capillary exceeds the outside diameter of the fiber, wherein the fiber is arranged within the capillary (column 3, lines 30-44), and wherein the capillary comprises the protective medium (19) to achieve a dielectric strength within the capillary, which dielectric strength is suitable for the operating conditions (column 1, lines 29-36).

Column 3, lines 30-44 of the Maschek patent does not make reference to any capillary formed within the high-voltage insulator 6. Thus, there is no "capillary" as recited in Applicants' claim 1 disclosed in the Figure 1 embodiment of the Maschek patent. The Maschek patent also fails to disclose a capillary which comprises a protective medium as recited in Applicants' claim 1. Column 4, lines 12-16 of the Maschek patent describe that **free ends** of the optical waveguides 11 are protected by electrically insulating strain-relief hoses 19 of the Figure 5 embodiment. There is no teaching or suggestion that the strain-relief hoses 19 are contained within the insulator 6 of the Maschek embodiment or that they function as Applicants' claimed protective medium contained within a capillary. Element 19 in Figure 5 is an insulating strain-relief hose (Col. 4, lines 7-14) and not a protective medium within a capillary, nor does it function to achieve a higher dielectric strength within a capillary. Maschek discloses achieving higher dielectric strength by a greater length of the optical waveguide (Col. 1, lines 29-33).

Thus, the Maschek patent does not disclose a capillary as recited in Applicants' claim 1 combination, nor does the Maschek patent disclose a protective medium within a capillary to achieve dielectric strength in the capillary suitable for the operating conditions. The Examiner's reference to column 1, lines 29-36 merely addresses compensation of the electric strength of an optical waveguide using a greater length of the optical waveguide. There is no discussion in this portion of the Maschek patent of a capillary, or protective medium contained within a capillary, as recited in Applicants' claim 1.

As such, claim 1 is allowable. Claim 11 recites similar features in the context of a method for producing a high-voltage component, and is similarly allowable.

The dependent claims recite additional advantageous features of the present invention which further distinguish over the documents relied by the Examiner. Because none of the secondary documents relied upon by the Examiner overcome the deficiencies of the Maschek patent as noted above, the dependent claims, like the independent claims, are allowable.

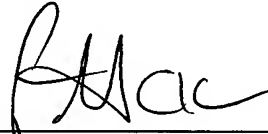
All objections and rejections raised in the Office Action having been addressed, it is respectfully submitted that the application is in condition for allowance and a Notice of Allowance is respectfully solicited.

Respectfully submitted,

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